

Doku-Index

1. Projekt
2. Auftraggeber
3. Zweck
4. Grund
5. Was wird gemacht
6. Externe Bibliotheken
7. Auflistung verwendeter API functions,
methods und structs
8. Windows API in VBA (Bilder)
9. Vorsicht bei Verwendung

1. **Projekt:** VBA Windows API Funktionen

2. **Auftraggeber:** -

3. **Zweck:** VBA Funktionserweiterung

4. **Grund:** -

5. **Was wird gemacht:** Auf Windows API in VBA zugreifen

6. **Externe Bibliotheken:** Windows API

7. **Auflistung verwendeter API functions, methods und structs**

NAME	DLL, LIB, HEADER	C++ Typ/ Return Value	VBA Typ
OFSTRUCT	Winbase.h	struct	Type
OPENFILENAME	Commdlg.h	struct	Type
ShellExecute	Shell32.dll	HINSTANCE	Declare
GetOpenFileName	Comdlg32.dll	BOOL	Declare
CloseHandle	Kernel32.dll	BOOL WINAPI	Declare
OpenFile	Kernel32.dll	HFILE	Declare
GetFileSecurity	Advapi32.dll	BOOL	Declare
PathIsNetworkPath	Shlwapi.lib	BOOL	Declare
PathIsUNC	Shlwapi.lib	BOOL	Declare
PRINTER_DEFAULTS	Winspool.h	struct	Type
PRINTER_INFO_2	Winspool.h	struct	Type
DEVMODE	Wingdi.h	struct	Type
ClosePrinter	Winspool.drv	BOOL	Declare
DocumentProperties	Winspool.drv	LONG	Declare
GetPrinter	Winspool.drv	BOOL	Declare
OpenPrinter	Winspool.drv	BOOL	Declare
SetPrinter	Winspool.drv	BOOL	Declare
EnumPrinters	Winspool.drv	BOOL	Declare
PtrToStr	Kernel32.dll	LPSTR	Declare
StrLen	Kernel32.dll	int	Declare
CopyMemory	Kernel32.dll	void	Declare
Sleep	Kernel32.dll	void	Declare
DeviceCapabilities	Winspool.drv	int	Declare
GetWindowLongPtr	User32.dll	LONG_PTR WINAPI	Declare
SetWindowLongPtr	User32.dll	LONG_PTR WINAPI	Declare
GetSystemMetrics32	User32.dll	int WINAPI	Declare
GetDeviceCaps	User32.dll	int	Declare
GetDC	User32.dll	HDC	Declare

NAME	DLL, LIB, HEADER	C++ Typ/ Return Value	VBA Typ
ReleaseDC	User32.dll	int	Declare
GetActiveWindow	User32.dll	HWND WINAPI	Declare
FindWindow	User32.dll	HWND WINAPI	Declare
DrawMenuBar	User32.dll	BOOL	Declare
SetLastError	Kernel32.dll	void WINAPI	Declare
gethostbyname	Winsock2.h/ Ws2_32.dll	struct hostent* FAR	Declare
WSAStartup	Winsock2.h/ Ws2_32.dll	int	Declare
WSACleanup	Winsock2.h/ Ws2_32.dll	int	Declare
IcmpCreateFile	Icmp.dll	HANDLE	Declare
inet_addr	Winsock2.h/ Ws2_32.dll	unsigned long	Declare
IcmpCloseHandle	Icmp.dll	BOOL	Declare
IcmpSendEcho	Icmp.dll	DWORD	Declare
ICMP ECHO REPLY	Icmp.dll	struct	Type
IP OPTION INFORMATION	Ipexport.h	struct	Type
WSADATA	Winsock2.h	struct	Type

8. Windows API in VBA (Bilder):

```
Private Type OFSTRUCT
    cBytes      As Byte
    fFixedDisk  As Byte
    nErrCode    As Integer
    Reserved1   As Integer
    Reserved2   As Integer
    szPathName (OFS_MAXPATHNAME) As Byte
End Type
```

```
Private Declare PtrSafe Function FindWindow _
    Lib "user32.dll" Alias "FindWindowA" ( _
        ByVal lpClassName As String, _
        ByVal lpWindowName As String) _
    As LongPtr
```

```
#If VBA7 Then
Private Declare PtrSafe Function ShellExecute _
    Lib "shell32.dll" Alias "ShellExecuteA" ( _
        ByVal hwnd As Long, _
        ByVal lpOperation As String, _
        ByVal lpFile As String, _
        ByVal lpParameters As String, _
        ByVal lpDirectory As String, _
        ByVal nShowCmd As Long) _
    As Long
```

Funktion welche prüft ob der aktuelle Benutzer berechtigt ist die angegebene Datei(pName) zu verändern.

```
Public Function PermissionGranted(ByVal pName As String) As Boolean
    Dim retVal      As Long
    Dim lSizeNeeded As Long
    Dim bSecDesc()  As Byte

    Const DACL_SECURITY_INFORMATION As Long = &H4
    Const OWNER_SECURITY_INFORMATION As Long = &H1

    retVal = GetFileSecurity(pName, _
                            OWNER_SECURITY_INFORMATION, _
                            0, _
                            0&, _
                            lSizeNeeded)

    ReDim bSecDesc(0 To lSizeNeeded) As Byte

    retVal = GetFileSecurity(pName, _
                            OWNER_SECURITY_INFORMATION, _
                            bSecDesc(0), _
                            lSizeNeeded, _
                            lSizeNeeded)

    PermissionGranted = CBool(retVal)

End Function
```

9. Vorsicht bei Verwendung:

Bitte beachten, dass es einige Funktionen in der Windows API gibt, welche nicht in jeder Office Version funktionieren. Es muss ggf. geprüft werden, ob es sich gerade im Editor um VB7.0 handelt und/oder ob es Windows 64-bit ist.

Hilfreiche Links:

- [Kompatibilität 32-Bit/ 64-Bit](#)
- [Für einen leichteren Einstieg](#)
- [Deklarieren von API Funktionen in 64-Bit Office](#)
- [Microsoft Code Compatibility Inspector](#)